

METHOD AND DEVICE FOR SEGMENTING A POINT DISTRIBUTIONABSTRACT

In order to segment a distribution of points into partial areas with predetermined structural elements, a feature vector ( $\vec{x}_i$ ) whose components are determined based on several scaling factors is ascertained for each point ( $\vec{p}_i$ ); the accompanying feature vectors ( $\vec{p}_i^1$ ) are determined for a predetermined number of reference points ( $\vec{p}_i^1$ ) for which the respective allocation to one of the structural elements is given, and texture classes each corresponding to the underlying structural elements are formed out of the feature vectors of the reference points; a distance to each of the texture classes is determined for all remaining points ( $\vec{p}_i^u$ ) of the point distribution that are not reference points ( $\vec{p}_i^u$ ); and the partial areas of the segmentation are formed out of the reference points respectively belonging to a texture class and the allocated points.

(Fig. 2)